



**FACULTY OF MEDICINE, UNIVERSITY OF RUHUNA, GALLE**  
**Final Examination for Medical Degrees – February 2023**  
**SURGERY - PAPER I**

Thursday 23<sup>rd</sup> February 2023

3 hours (1.00 p.m. to 4.00 p.m.)

Answer **ALL Eight (08)** Questions.

1. A 60 year old woman known to have diverticular disease of the sigmoid colon presents with recurrent episodes of lower abdominal pain, frequency, dysuria, passage of particulate matter and air in urine for 3 weeks.

1.1. What is the most likely diagnosis? (25 marks)

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1.2. Explain the pathogenesis of the above presentation. (25 marks)

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1.3. List the investigations with the expected findings to arrive at diagnosis mentioned in 1.1. (25 marks)

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1.4. List the steps in treating this patient.

(25 marks)

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2. A 25 year old man riding a motor cycle at a speed of 60 km/h met with a road traffic accident and was brought to the surgical casualty ward. He has a swollen deformed right mid-thigh and unable to move the limb due to pain.

2.1. List the steps in the initial management of this patient within the first hour of admission.

(30 marks)

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2.2. Describe briefly two (02) life threatening complications associated with the injury in the thigh of this patient.

(40 marks)

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2.3. List four complications of fracture healing. (10 marks)

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3. A 56 year old man is admitted with cellulitis of the right leg. He was prescribed Coamoxyclav 1.2g intravenous 8 hourly. He complains of shortness of breath 20 minutes after the first injection.

3.1. What is the most likely diagnosis? (10 marks)

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3.2. List five (05) physical signs which would support your diagnosis. (25 marks)

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3.3. List five (05) important steps in the management of this patient. (25 marks)

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3.4. What is the test that could be done to confirm the diagnosis mentioned in 3.1?

(10 marks)

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3.5. List **three** (03) important measures you would take when discharging this patient.

(30 marks)

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**4.**

4.1. A year old boy presents to a surgical clinic with painless swelling in the scrotum.

4.1.1. State **two** (02) possible causes for the swelling.

(10 marks)

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4.1.2. List the clinical features which would confirm the diagnosis of each condition stated in 4.1.1?

(15 marks)

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4.1.3. Briefly outline the management of each condition you stated in 4.1.1.

(20 marks)

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4.2. A 30 year old man is admitted to the surgical casualty with a hot water burn. Entire anterior chest and the anterior abdominal wall and the whole right upper limb are affected with the burn. His body weight is 50kg.

4.2.1. What is the approximate percentage of burn? *(10 marks)*

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4.2.2. What is the fluid requirement for this man for the first 24 hours according to the Parkland formula? *(15 marks)*

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4.2.3. List the steps of initial management of this patient. *(30 marks)*

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5. A 40 year old mother of 3 children presented with right hypochondrial pain and fever for two days duration. On examination, she had positive murphy's sign.

5.1. What would be the clinical diagnosis? *(05 marks)*

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5.2. What would be the most cost-effective imaging technique that helps to arrive at a diagnosis? (05 marks)

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5.3. List **three** (03) important findings in the imaging technique mentioned in 5.2 that confirms the diagnosis. (15 marks)

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5.4. List the important steps in the management of this patient on admission. (10 marks)

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5.5. Patient developed jaundice on the second day of admission. Enumerate **four** (04) complications that would occur in this patient ~~at this age.~~ (20 marks)

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5.6. List the steps in the management of **one** complication mentioned in 5.5 (15 marks)

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5.7. What is the best imaging technique without radiation hazard that would diagnose the possible cause for jaundice mentioned in 5.5? (05 marks)

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5.8. What is the best imaging as well as therapeutic procedure that could be used to manage the condition mentioned in 5.5? (05 marks)

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5.9. List four (04) complications of the procedure mentioned in 5.8. (20 marks)

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6. List the steps in the management of the following,

6.1. Thyroglossal cyst (10 marks)

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6.2. Graves' disease (30 marks)

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6.3. Hypocalcemia following thyroidectomy

(30 marks)

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6.4. Stridor following thyroidectomy

(30 marks)

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7. A 67 year-old woman presents with a creamy discharge from her left nipple which has a slit-like appearance. There is no associated underlying mass.

7.1. What is the most likely diagnosis?

(30 marks)

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7.2. List the investigations that you would order to confirm the diagnosis.

(30 marks)

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7.3. Outline the management of the above condition. (40 marks)

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8. A 40 year old healthy man presents with severe recurrent right loin pain for 2 weeks. Plain X-ray abdomen shows a possible 9 mm stone in right upper ureter.

8.1. What is the best investigation for definitive diagnosis and further management? (20 marks)

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8.2. List the specific features to look for in this investigation that will be useful in the management. (20 marks)

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8.3. List the definitive treatment options for this patient. (20 marks)

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8.4. List **three (03)** important complications that could occur due to this stone.

*(15 marks)*

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8.5. List the steps in the management, if this patient develops high fever with chills and rigors with severe right loin tenderness.

*(25 marks)*

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